

Overview



2

Technical specifications

SIMATIC Mobile Panel 277	6AV6 645-0CA01-0AX0 8" with integral acknowledgment button	6AV6 645-0CB01-0AX0 8" with integral acknowledgment button and STOP button	6AV6 645-0CC01-0AX0 8" with integral acknowledgment button, STOP button, handwheel, keyswitch and illuminated pushbutton	6AV6 645-0BE02-0AX0 10" with integral acknowledgment button and STOP button
Display				
Size	7.5"	7.5"	7.5"	10.4"
Display type	TFT, 65536 colors	TFT, 65536 colors	TFT, 65536 colors	TFT, 65536 colors
Resolution (pixels) • Resolution (WxH in pixel)	640 x 480	640 x 480	640 x 480	800 x 600
Backlighting • MTBF backlighting (at 25 °C)	about 50,000 hours	about 50,000 hours	about 50,000 hours	about 50,000 hours
Control elements				
Operating options	Keys and Touch	Keys and Touch	Keys and Touch	Touch
Function keys, programmable	18 function keys, 18 with LEDs	18 function keys, 18 with LEDs	18 function keys, 18 with LEDs	none
Connection for mouse/keyboard/ barcode reader	USB / USB / USB	USB / USB / USB	USB / USB / USB	USB / USB / USB
Keyboard fonts • System keys				0
Touch operation • Touch screen	Analog, resistive	Analog, resistive	Analog, resistive	Analog, resistive
Special operator controls • Illuminated pushbutton	No	No	Yes; Two illuminated pushbuttons	No
• Handwheel	No	No	Yes	No
Supply voltage				
Supply voltage	via connection box	via connection box	via connection box	via connection box, DC
Backup battery				
Battery operation	maximum buffer time 10 min	maximum buffer time 10 min	maximum buffer time 10 min	maximum buffer time 10 min
• Charging duration • Number of loading cycles, min				5 h 500
Processor				
Processor	ARM, 520 MHz	ARM, 520 MHz	ARM, 520 MHz	ARM, 520
Memory				
Type	Flash / RAM	Flash / RAM	Flash / RAM	Flash / RAM
Usable memory for user data	6 MB usable memory for user data	6 MB usable memory for user data	6 MB usable memory for user data	6 MB usable memory for user data

Operator panels

Mobile Panels - 270 series

SIMATIC Mobile Panel 277

Technical specifications (continued)

SIMATIC Mobile Panel 277	6AV6 645-0CA01-0AX0 8" with integral acknowledgment button	6AV6 645-0CB01-0AX0 8" with integral acknowledgment button and STOP button	6AV6 645-0CC01-0AX0 8" with integral acknowledgment button, STOP button, handwheel, keyswitch and illuminated pushbutton	6AV6 645-0BE02-0AX0 10" with integral acknowledgment button and STOP button
Time of day				
Clock				
• Type	Hardware clock, battery backup, synchronizable	Hardware clock, battery backup, synchronizable	Hardware clock, battery backup, synchronizable	Hardware clock, battery backup, synchronizable
Interfaces				
Interfaces	1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)	1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)	1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)	1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)
USB port	1 x USB	1 x USB	1 x USB	1 x USB
Multi Media Card slot	1 MMC/SD card slot	1 MMC/SD card slot	1 MMC/SD card slot	
Multimedia card/SD card slot				combined
Industrial Ethernet				
• Industrial Ethernet interface	1 x Ethernet (RJ45)	1 x Ethernet (RJ45)	1 x Ethernet (RJ45)	1 x Ethernet (RJ45)
Protocols				
PROFINET				Yes
Supports protocol for PROFINET IO				Yes
Degree and class of protection				
IP65 enclosure	Yes	Yes	Yes	Yes
Standards, approvals, certificates				
Certifications	CE, cULus, C-TICK, SIBE	CE, cULus, C-TICK, SIBE	CE, cULus, C-TICK, SIBE	CE, cULus, C-TICK, SIBE
Performance level acc. to EN ISO 13849-1	d	d	d	d
Safety category according to EN954-1	Safety category according to EN954-1 (acknowledgment button, STOP button if present) 3	Safety category according to EN954-1 (acknowledgment button, STOP button if present) 3	Safety category according to EN954-1 (acknowledgment button, STOP button if present) 3	Safety category according to EN954-1 (acknowledgment button, STOP button if present) 3
Ambient conditions				
Drop height	1.2 m	1.2 m	1.2 m	1 m
Operating temperature				
• Operation	0 °C to +40 °C	0 °C to +40 °C	0 °C to +40 °C	0 °C to +40 °C
Storage/transport temperature				
• Transport, storage	-20 °C to +60 °C	-20 °C to +60 °C	-20 °C to +60 °C	-20 °C to +60 °C
Relative humidity				
• max. relative humidity	80 %	80 %	80 %	80 %
Operating systems				
Operating system	Windows CE	Windows CE	Windows CE	Windows CE
Languages				
Online languages				
• Number of online/runtime languages	16	16	16	16
Functionality under WinCC flexible				
Libraries	Yes	Yes	Yes	Yes
Task planner	Yes	Yes	Yes	Yes
With alarm logging system (incl. buffer and acknowledgment)				
• Number of messages	4 000	4 000	4 000	4 000
• Bit messages	Yes	Yes	Yes	Yes
• Analog messages	Yes	Yes	Yes	Yes
Recipes				
• Number of recipes	300	300	300	300
• Data records per recipe	500	500	500	200
• Entries per data record	1 000	1 000	1 000	1 000
• Recipe memory	64 KB integrated Flash, expandable	64 KB integrated Flash, expandable	64 KB integrated Flash, expandable	64 KB integrated Flash, expandable

Operator panels

Mobile Panels - 270 series

SIMATIC Mobile Panel 277

Technical specifications (continued)

SIMATIC Mobile Panel 277	6AV6 645-0CA01-0AX0 8" with integral acknowledgment button	6AV6 645-0CB01-0AX0 8" with integral acknowledgment button and STOP button	6AV6 645-0CC01-0AX0 8" with integral acknowledgment button, STOP button, handwheel, keyswitch and illuminated pushbutton	6AV6 645-0BE02-0AX0 10" with integral acknowledgment button and STOP button
Variables				
• Number of variables per device	2 048	2 048	2 048	2 048
• Limit values	Yes	Yes	Yes	Yes
• Multiplexing	Yes	Yes	Yes	Yes
Images				
• Number of configurable images	500	500	500	500
Image objects				
• Text objects	10,000 text elements	10,000 text elements	10,000 text elements	10,000 text elements
• Graphics object	Bit maps, icons, vector graphics	Bit maps, icons, vector graphics	Bit maps, icons, vector graphics	Bit maps, icons, vector graphics
Complex image objects				
• Status/control	With SIMATIC S7	With SIMATIC S7	With SIMATIC S7	With SIMATIC S7
• dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons	Diagrams, bar graphs, sliders, analog display, invisible buttons	Diagrams, bar graphs, sliders, analog display, invisible buttons	Diagrams, bar graphs, sliders, analog display, invisible buttons
Lists				
• Number of text lists per project	500	500	500	500
• Number of graphics lists per project	400	400	400	400
Archiving				
• Number of archives per device	20	20	20	20
• Number of measuring points per project	20	20	20	20
• Number of entries per archive	10 000	10 000	10 000	10 000
Security				
• Number of user groups	50	50	50	50
• Number of user rights	32	32	32	32
• Password export/import	Yes	Yes	Yes	Yes
Logging through printer				
• Recording/Printing	Alarms, report (shift report), color print, hardcopy	Alarms, report (shift report), color print, hardcopy	Alarms, report (shift report), color print, hardcopy	Alarms, report (shift report), color print, hardcopy, PROFINET
Transfer (upload/download)				
• Transfer of configuration	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition
Process coupling				
• Connection to controller	S5, S7-200, S7-300/400, TI 505, Win AC, PC (TCP/IP), SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"	S5, S7-200, S7-300/400, TI 505, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"	S5, S7-200, S7-300/400, TI 505, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"	S5, S7-200, S7-300/400, TI 505, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
I/O				
I/O devices	Printer, barcode reader	Printer, barcode reader	Printer, barcode reader	Printer, barcode reader
• Multi Media Card	Yes	Yes	Yes	Yes
Mechanics/material				
Type of housing (front)	Plastic	Plastic	Plastic	Plastic
Dimensions				
Housing diameter/depth (mm)	Dia 290 mm / D 103 mm	Dia 290 mm / D 103 mm	Dia 290 mm / D 103 mm	
Weight				
Weight	1.7 kg	1.7 kg	1.7 kg	2.3 kg

Operator panels

Mobile Panels - 270 series

SIMATIC Mobile Panel 277

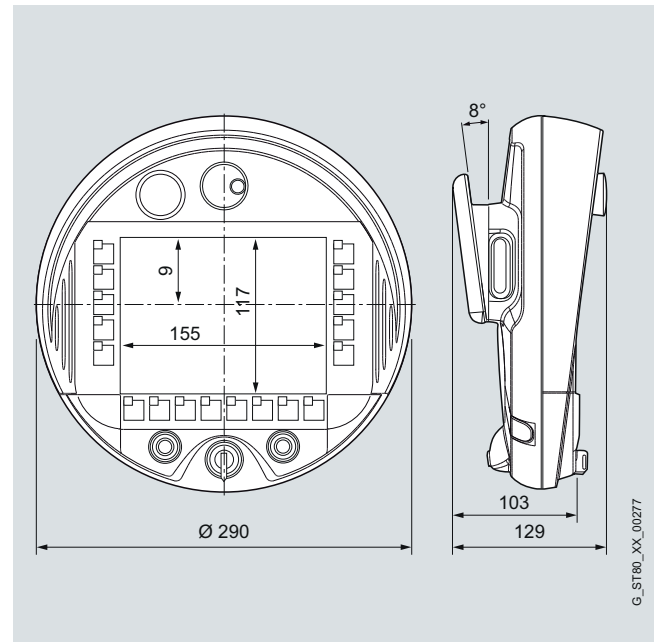
Ordering data	Order No.
SIMATIC Mobile Panel 277 8" ¹⁾	
• With integrated acknowledgement button	6AV6 645-0CA01-0AX0
• With integrated acknowledgement button and STOP pushbutton	6AV6 645-0CB01-0AX0
• With integrated acknowledgement button, STOP pushbutton, handwheel, key-operated switch and two illuminated pushbuttons	6AV6 645-0CC01-0AX0
SIMATIC Mobile Panel 277 10"	
• With integrated acknowledgement button and STOP pushbutton	6AV6 645-0BE02-0AX0
Configuration	
with SIMATIC WinCC flexible	See HMI software
Documentation (to be ordered separately)	
Operating Instructions for Mobile Panel 277	
• German	6AV6 691-1DL01-0AA0
• English	6AV6 691-1DL01-0AB0
• French	6AV6 691-1DL01-0AC0
• Italian	6AV6 691-1DL01-0AD0
• Spanish	6AV6 691-1DL01-0AE0
User Manual WinCC flexible Compact/Standard/Advanced	
• German	6AV6 691-1AB01-3AA0
• English	6AV6 691-1AB01-3AB0
• French	6AV6 691-1AB01-3AC0
• Italian	6AV6 691-1AB01-3AD0
• Spanish	6AV6 691-1AB01-3AE0
WinCC flexible Communication User Manual	
• German	6AV6 691-1CA01-3AA0
• English	6AV6 691-1CA01-3AB0
• French	6AV6 691-1CA01-3AC0
• Italian	6AV6 691-1CA01-3AD0
• Spanish	6AV6 691-1CA01-3AE0
SIMATIC HMI Manual Collection	6AV6 691-1SA01-0AX0
Electronic documentation, on DVD	
5 languages (English, French, German, Italian and Spanish); contains: all currently available user manuals, manuals and communication manuals for SIMATIC HMI	
System components for Mobile Panels	
DP connection box for Mobile Panels (MPI/PROFIBUS)	
• Basic	6AV6 671-5AE00-0AX0
• Plus	6AV6 671-5AE10-0AX0
PN connection box for Mobile Panel (PROFINET)	
• Basic	6AV6 671-5AE01-0AX0
• Plus	6AV6 671-5AE11-0AX0
Connecting cable and accessories for Mobile Panels	See HMI accessories

¹⁾ The system components (connecting cables and connection boxes) must be ordered separately.

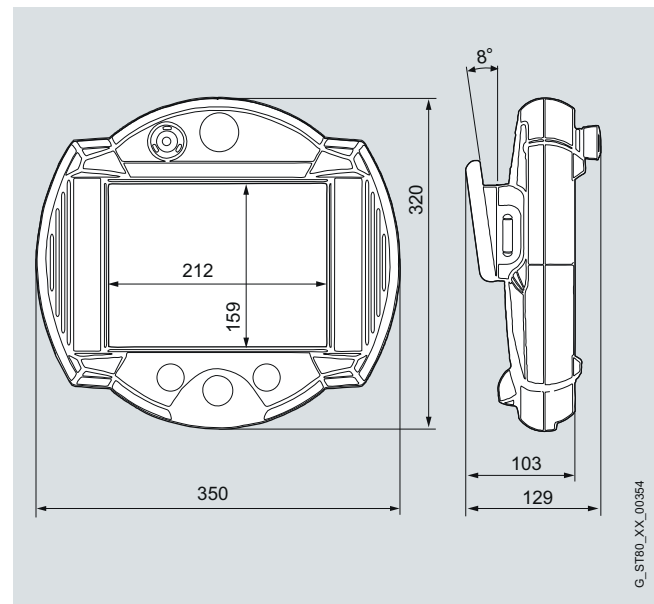
²⁾ Delivery time approximately 6 weeks

Dimensional drawings

All dimensions in mm. For installation cutout, see technical specifications.



Mobile Panel 277 8", front and side view



Mobile Panel 277 10", front and side view

More information

Additional information is available in the Internet under:

<http://www.siemens.com/simatic-mobile-panels>

Note:

Do you need a specific modification or option for the products described here? Then look up "Customized products", where you will find information about additional sector-specific products that can be ordered as well as about options for customer-specific modification and adaptation.

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